

## CLAIMS:

1. An amplifier device (10), said amplifier device comprising:  
amplifier (1) means for amplifying a radio-frequency input signal RFin,  
a controllable feedback loop (1c) for adjusting a gain and a bias voltage  
applied to the amplifier means (1) for adjusting a current determining a noise level, the  
feedback loop and the bias voltage being arranged to provide at least two different modes, a  
first mode providing high gain and low noise for handling weak signals and a second mode  
providing low-gain power splitting for handling strong signals.
2. An amplifier device (10) as claimed in claim 1, wherein the amplifier device  
(10) comprises mode selection means (15), and the feedback loop (1c) is connected between  
an output (1a) and an input (1b) of the amplifier means (1), the feedback loop (1c)  
comprising at least a first resistor (R1) and a second resistor (R2) connected in parallel to  
each other, and wherein the second resistor (R2) is connected in series with a switch (SW1)  
controlled by the mode selection means (15), which also control the bias voltage applied to  
the amplifier means (1).
3. An amplifier device (10) as claimed in claim 1, wherein the mode selection  
means (15) are arranged to control the feedback loop (1c) and the bias voltage to provide a  
third mode providing high gain and high current.
4. A product comprising the amplifier device (10) as claimed in claim 1 and  
means for selecting the at least two different modes.
5. A method of amplifying a radio-frequency signal, the method comprising the  
step of:  
amplifying the signal in at least a first mode and a second mode by amplifier  
means having at least two modes, said first mode providing high gain and low noise for weak  
signals, and said second mode providing low-gain power splitting for handling strong signals.

6. A method as claimed in claim 5, further comprising the step of:  
amplifying the signal in a third mode, said third mode providing high gain and high current  
for medium signals.